

REMARKS

The claims are claims 1, 3, 10, 19 and 20.

Claims 1, 10, 19 and 20 have been amended to further clarify the subject matter. The definitions of the first and second Booth decoder cells have been amended to require that "each of said first Booth decoder cell structurally the same as each of said second Booth decoder cell except that at least one of a first plurality of transistors of said first Booth decoder cell is constructed to have a width greater than a width of a corresponding one of a second plurality of transistors of said second Booth decoder cell." "The definitions of the first and second Wallace tree cells have been amended to require that "each of said first Wallace tree cell structurally the same as each of said second Wallace tree cell except that at least one of a first plurality of transistors of said first Wallace tree cell is constructed to have a width greater than a width of a corresponding one a second plurality of transistors of said second Wallace tree cell." Claims 9 and 18 are newly canceled.

Claims 1, 9, 10, 12, and 18 to 20 were rejected under 35 U.S.C. 102(e) as anticipated by Hansen et al U.S. Published Patent Application No. 2003/0110197 A1.

Claims 1, 10, 19 and 20 recite subject matter not anticipated by Hansen et al. Claims 1, 10, 19 and 20 recite "each of said first Booth decoder cell structurally the same as each of said second Booth decoder cell except that at least one of a first plurality of transistors of said first Booth decoder cell is constructed to have a width greater than a width of a corresponding one of a second plurality of transistors of said second Booth decoder cell" and "each of said first Wallace tree cell structurally the same as each of said second Wallace tree cell except that at least one of a first plurality of transistors of

said first Wallace tree cell is constructed to have a width greater than a width of a corresponding one a second plurality of transistors of said second Wallace tree cell.". Hansen et al neither teaches a transistor difference in width of nor cells differing in any way. The OFFICE ACTION states at page 4, lines 1 and 2 and line 8:

"(e.g. it is impossible to manufacture all transistors with exact same width)"

The Applicants agree with this statement. The Applicants respectfully submit that the amended language requires manufacturing first Booth decoder cells differently than second Booth decoder cells and manufacturing first Wallace tree cells differently than second Wallace tree cells. In particular the amended language requires that each first cell has a transistor with a width greater than the corresponding transistor of each second cell. The normal manufacturing variability would not guarantee that a transistor of the first cell is always wider than the corresponding transistor of the second cell. Hansen et al fails to teach any difference between Booth decoder cells or between Wallace tree cells. Accordingly, claims 1, 10, 19 and 20 are not anticipated by Hansen et al.

Claims 1, 10, 19 and 20 recite further subject matter not anticipated by Hansen et al. Claims 1, 10, 19 and 20 each recite at least one critical path. As pointed out by the Examiner, Hansen et al inherently includes such critical paths. Apparatus claims 1 and 10 each recite "wherein said at least one first Wallace tree cell and said at least one first Booth decoder cell are disposed on said at least one critical path; and wherein said at least one second Wallace tree cell and said at least one second Booth decoder cell are disposed on an electrical path not said at least one critical path and are not disposed on any of said at least one

critical path." Method claims 19 and 20 similarly recite "disposing at least one first Wallace tree cell and at least one first Booth decoder cell on said at least one critical path; disposing at least one second Wallace tree cell and at least one second Booth decoder cell are on an electrical path not said at least one critical path; and not disposing any second Wallace tree cell or any second Booth decoder on any of said at least one critical path." Hansen et al fails to teach defining critical paths and two types of cells. Hansen et al likewise fails to teach that one type cell is used in critical paths and another type cell is used in paths not critical paths and not used in critical paths. Accordingly, claims 1, 10, 19 and 20 are allowable over Hansen et al.

Paragraph 5 on page 5 of the OFFICE ACTION states that claims 3 and 12 are allowable but dependent upon a rejected base claim. The Applicants respectfully submit that the above arguments show that base claims 1 and 10 are allowable. Thus claims 3 and 12 are allowable.

The Applicants respectfully submit that all the present claims are allowable for the reasons set forth above. Therefore early entry of this amendment, reconsideration and advance to issue are respectfully requested.

If the Examiner has any questions or other correspondence regarding this application, Applicants request that the Examiner contact Applicants' attorney at the below listed telephone number and address to facilitate prosecution.

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Respectfully submitted,

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